NEWS REPORT

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NATIONAL RESEARCH COUNCIL

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Editor: WALLACE W. ATWOOD, JR.

Editorial Office: 2101 Constitution Ave., Washington 25, D. C.

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NEWS REPORT

National Academy of Sciences National Research Council

VOLUME VIII *September-October 1958* NUMBER 5

Research and Training Programs for Visiting Scientists

M. H. TRYTTEN

Director, Office of Scientific Personnel

Postdoctoral Research Grants

FOR THE past five years the National Academy of Sciences–National Research Council has been administering a program of postdoctoral grants for foreign scientists under which these grantees may spend up to two years in American universities or comparable laboratories carrying out basic research in the area of their interests. This program, known as the Visiting Research Scientists Program, was originally in effect in the 14 European countries who were members of the Organization for European Economic Cooperation. The program is carried out under a contract with the International Cooperation Administration (ICA) which furnishes the funds supporting these grants.

In October 1957, the Academy–Research Council was asked to consider extending the program to many other countries throughout the world and subsequently entered into a contract with ICA to administer the program in something over forty countries on all continents. The program continues to include the European nations with the addition of Sweden, Finland, and Spain, and has been extended to Australia, New Zealand, most of the countries in the Near and Far East, to Egypt and the Sudan, as well as to most of the South American Republics.

In regard to administration, the program follows the pattern of the earlier European program. In each participating country the leading scientific organization–an academy of sciences or a research council as the case may be–is asked to accept sponsorship of the program, announce it, receive applications, and to select by a committee of leading scientists the best candidates for nomination to the Academy–Research Council in Washington. The placement of these candidates after final selection is carried out by the staff of the Office of Scientific Personnel under Dr. Walter F. Colby, the program director.

Arrangements for local sponsorship in each of the participating countries were made by personal visits and conferences with leading scientists in the several countries by Academy personnel. Walter F. Colby, Wallace W. Atwood, Jr., Andre C. Simonpietri, Harold J. Coolidge, and M. H. Trytten all assisted in this part of the arrangements.

The program was well received. Nominations from most countries already have been accepted and placements are being made.

The extension of the program to a much wider area of the world obviously indicates that it is serving a useful purpose. The experience in Europe has been a happy one. The young scientists themselves have been most appreciative of the opportunity for study in the United States and have generally gone back to positions of importance in their own lands. At the same time they have contributed to the furtherance of basic research in our scientific institutions. Originally the program was deemed to be desirable as a contribution to the European area by acquainting young scientists with American practice in the relationship between academic and industrial research. While the program no doubt contributed to this objective, other worthwhile objectives have been attained which seem of considerable importance in respect to the worldwide program.

The strengthening of the scientific activities of the free world is important per se. Intimate relationships between American scientists and the leading scientists of the future in these many countries can be of great significance. As before these young scientists contribute much to American science while guests in American laboratories. Finally, the direct cooperation between the organizations of scientists abroad and the Academy–Research Council offers a means of strengthening relationships which could lead to other fruitful cooperative activities.

Aside from these benefits, there is the deeper question of the responsibility the nations leading in scientific competence have to assist in the development of indigenous scientific movements in nations less advanced. The burning desire for self-betterment and improved conditions which is so evident in these countries finds its focus in most instances in an urge to improve education and in particular to improve technology. Consequently it would appear to be of major importance to assist in strengthening the educational programs with special emphasis on scientific education. The needs are, of course, great. Not only is assistance needed in the basic sciences, but in the fields of public health, sanitation, natural resources, conservation, and in applied science for industry. The latent human resources in most of these countries are enormous.

No firm plans for continuation of this program have been made as yet, since continued support by ICA depends on the budget support available. However, there seems to be continued enthusiasm for this type of program, and it would seem probable that a continued effort of this kind would be supported.

Atomic Energy Training Fellowships

The International Atomic Energy Agency (IAEA), established in Vienna on July 29, 1957, is a significant new development in international scientific cooperation. Concerned as the Agency is with the peaceful uses of atomic energy, its activities are strongly directed toward assisting less advanced countries in the development of their competence in and familiarity with the techniques in this area of science.

Much of their activity has been spent in the development of fellowship programs. A number of countries possessing leadership in this area of science have made opportunities available to young scientists of other countries for study and training in this field. These opportunities are made available through the IAEA in Vienna. Besides these, the Agency itself has a fund at its command by which it can finance a limited number of additional opportunities.

The United States has offered 120 grants, an initial offering of 20 to be available in the fall of 1958 and an additional 100 to be offered within the next year. These training and study grants are also administered by the Academy–Research Council through the Office of Scientific Personnel, and Dr. Walter F. Colby is also in charge of this program.

Some of these grants are for training in the combined program at either Pennsylvania State University or the University of North Carolina, followed by a program at the International School of Nuclear Science and Engineering at the Argonne National Laboratories. The remaining grants will be for use at other American universities or institutions and may vary in length from

courses of a few months for training in specific techniques to longer tenures at research establishments.

Some of these appointments have already been made, and ten grantees are now in the United States participating in the program of the International School of Nuclear Science and Engineering that started in September. The applications received have surpassed by several times the number of opportunities offered for the fall of 1958. Approximately nineteen countries of origin are represented.

The program is authorized for two years as indicated above. Whether it will continue has not yet been decided, but it seems likely that fellowship awards will continue to be one of the central activities of the IAEA until the less advanced countries have made substantial gains in competence, or until other means of providing for education and training become available.

Fifth General Assembly International Geophysical Year

HUGH ODISHAW,
Executive Director
United States National Committee, International Geophysical Year

THE FIFTH General Assembly of the International Geophysical Year (IGY) was held in Moscow, July 30–August 9, 1958. The purpose of the Assembly was to review the status of IGY as it approached its end (December 31, 1958) and to consider future needs in geophysics both with respect to terminating IGY and to fields where additional international cooperation appeared desirable.

Approximately 365 scientists attended the Assembly, representing IGY committees from 35 of the 66 participating countries.

The Assembly was called by the Special Committee for the IGY (CSAGI). This Committee was established by the International Council of Scientific Unions (ICSU) in 1952 to coordinate the international program. As at previous general assemblies, the meeting of CSAGI was characterized by working groups in the various IGY fields: world data centers, world days, meteorology, geomagnetism, aurora and airglow, ionospheric physics, solar activity, cosmic rays, glaciology, oceanography, rockets and satellites, seismology, gravity measurements, nuclear radiation, and publications. The working groups, composed of scientific experts from the various delegations, met regularly during the assembly period.

A review of the flow of data to and among the three IGY World Data Centers indicated that satisfactory progress is being made in this aspect of the IGY if account is taken of the routine problems associated with the collection, checking, handling, mailing, and reproduction of basic data. The Assembly urged, however, that the flow be accelerated and recommended that participants make copies available directly to all three Data Centers in order to speed up the exchange of data and reduce the reproduction burden on the World Data Centers. The Assembly requested that in addition to raw data the World Data Centers also collect reprints of published results of IGY programs; and, in view of the value to scientists of these comprehensive collections of data, that the Centers continue to operate as long as possible.

The single area in which completely satisfactory agreement was not achieved related to rocket and satellite data. With

regard to scientific data from rocket and satellite experiments, there were alternative proposals that preliminary data be supplied on a routine basis to the World Data Centers in advance of final publications, and on the other hand that only final published papers be supplied routinely, with preliminary data furnished only upon specific request. A second point of difference was whether size, weight, and other information should be provided on all objects in orbit, including rocket carrier bodies and nose cones, or only on instrumented satellites. Finally, a question arose as to whether precise orbital data should be supplied, or only approximate direction angles for each observing station. The CSAGI has proposed a special committee to consider these three topics, and it is hoped that a satisfactory resolution may be achieved, which would then provide the degree of cooperation in this area which has characterized all the rest of the IGY.

The Assembly recommended that a World Magnetic Survey be undertaken during the coming period of solar minimum activity. IGY studies provide data during the peak of the sunspot cycle when the magnetic field undergoes rapid variations. The World Magnetic Survey, however, would provide data on the slow changes of the magnetic field and provide an up-to-date magnetic map. Such surveys are best conducted in magnetically quiet periods, the next of which takes place some four or five years from the present time.

The question of a prolongation of the IGY for another year was raised by the IGY Committee of the U.S.S.R. It was decided that the period of intensified geophysical research effort of the IGY should terminate as planned. However, it was proposed that the coming year be designated "International Geophysical Cooperation 1959" (IGC–1959) and that observational and data collection activities continue along the general plan of IGY "as far as practicable and at such level and in such fields as may be determined by each participating committee." This resolution, if acted upon favorably by the ICSU and its adhering bodies would have the following significance: *1*) it would provide a means for continued interchange of data among countries, and it is planned that data from contributed geophysical research during 1959 would be deposited in the IGY World Data Centers; and *2*) it would provide a transition period between the present IGY program and the subsequent undertakings for which there will be clear scientific needs for further international cooperation. As examples of the latter, there can be cited the Antarctic program and oceanography. The ICSU established special committees for these programs. The Special Committee on Antarctic Research (SCAR) has already planned the 1959 effort in which the countries active in the Antarctic during the IGY will continue their studies. A similar committee has been established for oceanography although the plans of this committee are somewhat longer range in nature. In addition, the ICSU will soon consider the establishment of appropriate committees in several other areas, including *1*) rocket and satellite research, *2*) solar patrols and alerts, and perhaps 3) the proposed World Magnetic Survey.

Agreement was reached on the publication of processed IGY data and results. A series of volumes, to be published in the *IGY Annals*, will be prepared under the direction of specialists in each field, namely the World Reporters. Although complete publication will take several years, the program will afford many advantages. First, economy in publication will be realized through this cooperative, international plan. Second, wide distribution of the IGY results will be possible through a single medium. Third, the long-range burden on World Data Centers should be appreciably reduced by the availability of these volumes.

During the Assembly a number of symposia were held. A total of some 200 scientific papers were presented, distributed among the following disciplines: meteorology, 23; oceanography, 10; rockets and satellites, 71; nuclear radiation, 6; seismology, 25; aurora and airglow, 10; ionosphere, 22; glaciology, 5; geomagnetism, 17; and cosmic rays, 10. These papers contributed to the growing conviction among IGY participants that the results of the IGY were fulfilling the expectations that had led to the launching of this ambitious endeavor.

SCIENCE NEWS

AUTUMN MEETING NATIONAL ACADEMY OF SCIENCES

The autumn meeting of the National Academy of Sciences will be held at the University of California at Berkeley, November 6–8. All the scientific sessions will be open to the public. The sessions on Thursday and Friday, November 6 and 7, will be held in Gilbert N. Lewis Hall; the Saturday sessions will be in the Radiation Laboratory Auditorium.

A symposium on "Nucleic Acids and Nucleoproteins," with Wendell M. Stanley, University of California at Berkeley, as chairman, will be held on Thursday morning. Following the afternoon sessions there will be a tour of the Low Temperature Laboratory and a reception for Academy members and guests by Chancellor and Mrs. Glenn T. Seaborg. In the evening Robert F. Bacher of the California Institute of Technology will deliver an address on "The Geneva Technical Conference on Nuclear Tests."

Friday morning there will be a short business meeting for members only, followed by scientific sessions. In the afternoon the Ernest O. Lawrence Memorial Lecture will be delivered by W. A. Nierenberg of the University of California at Berkeley who will speak on "Atomic Beam Research on Radioactive Atoms." Scientific sessions will follow the lecture.

On Friday evening, November 7, President and Mrs. Detlev W. Bronk will be hosts at a reception for Academy members and guests before the Academy dinner.

The scientific session on Saturday morning will be devoted to a symposium under the chairmanship of Edwin M. McMillan, Radiation Laboratory of the University of California. The afternoon will be spent on a tour of the Radiation Laboratory.

The Committee on Arrangements at the University of California for the autumn meeting is composed of the following members: Kenneth S. Pitzer, *Chairman;* Hugh L. Dryden, *ex officio;* Raymond T. Birge; Griffith C. Evans; Joel H. Hildebrand; Wendell M. Stanley; Curt Stern; and Francis J. Turner.

INTERNATIONAL COUNCIL OF SCIENTIFIC UNIONS

From September 20 through October 7 the International Council of Scientific Unions (ICSU), well known to many as the sponsor of the International Geophysical Year (IGY), met at the National Academy of Sciences. The first six days were devoted to meetings of the Bureau and Executive Board. Those sessions were followed by the Eighth General Assembly which was attended by more than 100 delegates from the National and Scientific Members of the International Council. All 13 unions and 29 of the member countries were represented. Lloyd V. Berkner, President of ICSU, presided.

A very brief summary of significant Assembly actions is given below. A more comprehensive report will appear in a subsequent issue of NEWS REPORT.

Political Non-Discrimination. The Assembly approved the following statement as being in keeping with the purely scientific character of ICSU:

1. To ensure the uniform observance of its basic policy of political non-discrimination, the ICSU affirms the right of the scientists of any country or territory to adhere to or to associate with international scientific activity without regard to race, religion or political philosophy.
2. Such adherence or association has no implications with respect to recognition of the government of the country or the territory concerned.
3. Subject only to payment of subscriptions and submission of required reports, the ICSU is prepared to recognize the academy, research council, national committee, or other bona fide scientific group representing scientific activity of any country or territory acting under a government de facto or de jure that controls it.
4. Meetings or assemblies of ICSU or of its dependent organisms such as its special committees and its joint commissions should be held in countries which permit participation of the representatives of every national member of ICSU or of the dependent organisms of ICSU concerned, and allow free and prompt dissemination of information related to such meetings.
5. ICSU and its dependent organisms will take all necessary steps to achieve adherence to these principles.

International Geophysical Year (IGY). The Assembly authorized establishment of the Special Committee for Inter-Union

Cooperation in Geophysics, to be known as the SCG. The new committee will replace the Special Committee for the International Geophysical Year (CSAGI) and come into being when the latter terminates on June 30, 1959. The primary task of the SCG will be to deal with all aspects of the closing stage of the IGY enterprise including the scheduled Cooperation in Geophysics in 1959, publication of IGY data and organization of international cooperation in the use and analysis of IGY data. Those programs of the IGY that have been entrusted to other Special Committees or Services of ICSU will be transferred to those Committees or Services on or before December 31, 1958.

Space Research. The Assembly recognized the desirability of continuing the international cooperation in space research initiated during the IGY and believed that this could best be achieved through ICSU. Accordingly it authorized the establishment of a Committee on Space Research (COSPAR). The terms of reference of the Committee are contained in the following paragraphs from the resolution adopted by the Assembly:

> The primary purpose of the Committee is to provide the world scientific community with the means whereby it may exploit the possibilities of satellites and space probes of all kinds for scientific purposes, and exchange the resulting data on a cooperative basis. It shall further report to ICSU those measures needed in the future to achieve the participation in international programs of space research of all countries of the world with those which are already actively engaged in research programs involving the use of instrumented earth satellites and space probes.
>
> The Committee shall hold as a primary objective the maximum development of space research programs by the international community of scientists working through the ICSU and its adhering national academies and unions. Recognizing, however, the need for international regulation and control of certain aspects of satellite and space probe programs the Committee shall keep itself fully informed on United Nations or other international activities in this field, in order to assure that maximum advantage is accorded international space science research through such regulations, and to make recommendations relative to matters of planning and regulation that may effect the optimum program of scientific research.

Oceanic Research. The Assembly ratified the action of the Executive Board in establishing the Special Committee on Oceanic Research (SCOR) to further the coordination of scientific activity in all branches of oceanic research with a view to framing a scientific program of worldwide scope and significance.

Antarctic Research. The Assembly ratified the action of the Executive Board in establishing the Special Committee on Antarctic Research (SCAR) to further coordination of scientific activity in Antarctica with a view to framing a scientific program of circumpolar scope.

Publications. The Assembly approved the establishment of a publications office to provide editorial and related services to all agencies of ICSU desiring such assistance. At the same time approval was granted for the publication of a quarterly journal to be known as *The ICSU Review.*

Finances. The Assembly approved an annual budget of $58,000 for each year of the next triennium, 1959–61. Special gifts from India, the United States, and the Soviet Union, totaling $28,000, were gratefully acknowledged by the Assembly.

Election of New Bureau. The Assembly elected the following officers and members of the Bureau for the period 1958–61:

Sir Rudolph Peters (Great Britain), *President*
Lloyd V. Berkner (United States), *Retiring President*
*Rev. Father P. Lejay (France), *Vice-President*
W. A. Engelhardt (U.S.S.R.), *Vice-President*
Col. E. Herbays (Belgium), *Treasurer*
Nicolai Herlofson (Sweden), *Secretary-General*
Arthur Stoll (Switzerland), *Member*
Seiji Kaya (Japan), *Member*

A special vote of appreciation for their valued service to ICSU was extended to the following retiring members of the Bureau: Bertil Lindblad (Sweden), Sir K. S. Krishnan (India), and Sir Harold Spencer Jones (Great Britain).

Local Arrangements. In keeping with custom at General Assemblies of ICSU, the Washington program included excursions and a number of social events. On Thursday, October 2, the opening day of the Assembly, the Deputy Under Secretary of State, the Honorable Robert L. Murphy, was host at a reception in honor of the delegates. Saturday afternoon was reserved

* Passed away, October 11, 1958, on return voyage to his homeland.

for visits to scientific laboratories in the Washington area and a special showing at the National Gallery of Art. In the evening the President of the National Academy of Sciences and Mrs. Detlev W. Bronk were hosts to the Assembly delegates at a reception and buffet supper in the Great Hall of the Academy. Early the next morning the delegates departed on an all-day excursion to the Blue Ridge Mountains of Virginia via the Skyline Drive. There were other events, of course, such as dinners and cocktail parties, and a special program for the ladies, but these can hardly be recorded fully in the space available in NEWS REPORT.

PLASTICS STUDY GROUP

In order to integrate its activities with those of related organizations, to speed the flow of information, and to streamline the planning for future meetings, the Plastics Study Group of the Building Research Institute has set up four task groups. Under the chairmanship of O. L. Pierson of Rohm and Haas Company, the **Inter-Society Communications** group will gather information about research on plastic products for building and will make such information available to the Institute for publication in *Building Science News* or in *Building Research Institute Abstracts*. The **Fire Hazard** group, with M. F. X. Gigliotti of the Monsanto Chemical Company as chairman, will explore the possibility of arranging a workshop or conference on the evaluation of fire hazards associated with the use of plastics. The **Information Advisory** group with W. F. Reardon, General Electric Company, as chairman will study the content and format of plastics information desired by the building industry and offer consulting services to plastics industry groups preparing guides and data handbooks on plastic materials. The **Arrangements** group, whose chairman is C. A. McElhone of Koppers Company, will develop plans for the next large meeting of the Plastics Study Group to be held in the fall of 1959. The task groups are already at work and have presented preliminary reports at the meeting of the Planning Committee on September 17.

INTERNATIONAL CONGRESS OF RADIATION RESEARCH

Approximately 800 registrants, including more than 150 from abroad, attended the International Congress of Radiation Research held August 11–16 at the University of Vermont under the joint sponsorship of the Academy–Research Council and the Radiation Research Society in cooperation with the European Committee on Radiobiology. Thirty-four invited papers and well over 300 contributed papers were offered at the meeting, the first such held in the United States. Detailed responsibility for the meeting was carried out on behalf of the Academy–Research Council by the Subcommittee on Radiobiology of the Division of Physical Sciences.

At the opening ceremonies on August 11, Congress participants heard written greetings from President Dwight D. Eisenhower and Detlev W. Bronk, President of the National Academy of Sciences. The Honorable Joseph B. Johnson, Governor of Vermont; John T. Fey, President of the University of Vermont; and Alexander Hollaender, President of the Congress, extended their greetings in person. Plenary sessions on the progress of radiation research followed, and papers were presented by F. S. Dainton, University of Leeds, England; R. Smoluchowski, Carnegie Institute of Technology; L. A. Stocken, University Museum, Oxford, England; L. H. Gray, Mt. Vernon Hospital, Northwood, England; L. Ehrenberg, University of Stockholm, Sweden; and R. H. Mole, Atomic Energy Research Establishment, Harwell, England. J. E. Willard of the University of Wisconsin and R. Latarjet of the Institut du Radium in Paris were chairmen of the morning and afternoon sessions, respectively. As many as six concurrent scientific sessions were held daily thereafter through Friday, covering all areas in the broad field of radiation research—radiation physics; radiation chemistry; radiation biochemistry; radiobiology at the cellular, histological, and wholebody levels; genetics; pathology, and hematology; prophylaxis, differential protection and therapy; late effects; dosimetry; and internal emitters.

A business meeting was called to con-

sider the advisability of holding future international congresses of radiation research. A working committee was elected to draft a constitution for a new international organization in the field of radiation research after consultation with national groups in the field. G. de Hevesy of the University of Stockholm, honorary president of the Congress, was named chairman.

Abstracts of the papers presented at the Congress were printed as a supplement to the July 1958 issue of *Radiation Research*, the official organ of the Radiation Research Society.

COMMITTEE ON ATMOSPHERIC SCIENCES

At the meeting of the Committee on Meteorology on June 30, Paul E. Klopsteg, formerly Associate Director (Research) of the National Science Foundation, accepted the chairmanship of the Committee from Lloyd V. Berkner, Associated Universities, Inc., who resigned in order to devote his full energies to the work of the newly formed Space Science Board of which he is chairman (*see* NEWS REPORT, Vol. VIII, p. 64).

On August 16 at the request of the new chairman, Detlev W. Bronk, President of the National Academy of Sciences, approved changing the name of the Committee on Meteorology to "Committee on Atmospheric Sciences." Dr. Klopsteg proposed the change in name believing that it would express more specifically the broad scope of interest and responsibility of the Committee and, at the same time, would remove the restrictive connotations frequently given to the word "meteorology" by scientists in related fields.

In addition to Dr. Klopsteg, the present membership of the Committee is as follows:

HORACE R. BYERS, University of Chicago, *Vice-Chairman*
HENRY G. BOOKER, Cornell University
JULE G. CHARNEY, Massachusetts Institute of Technology
HUGH L. DRYDEN, National Aeronautics and Space Agency
CARL ECKART, Scripps Institution of Oceanography
THOMAS F. MALONE, The Travelers Insurance Company
EDWARD TELLER, University of California at Berkeley

BUILDING RESEARCH ADVISORY BOARD

The Academy–Research Council has announced the appointment of the following members of the building industry to serve on the Building Research Advisory Board for 5-year terms each:

MALCOLM C. HOPE, U. S. Public Health Service
JOHN A. ROBERTSON, United States Gypsum Co.
IRA H. HARDIN, Ira H. Hardin Co.
ROBINSON NEWCOMB, Consulting economist
GLENN H. BEYER, Housing Research Center, Cornell University

In addition J. D. Cochrane, Jr., American Cyanamid, has been appointed to serve a one-year term. Richard H. Tatlow, III, of Abbot, Merk & Co., Inc., Engineers, has been made Vice-Chairman of the Board.

THIRD GENERAL ASSEMBLY INTERNATIONAL MATHEMATICAL UNION

The Third General Assembly of the International Mathematical Union (IMU) was held at St. Andrews, Scotland, August 11–13, 1958, immediately preceding the International Congress of Mathematicians at Edinburgh. The University of St. Andrews was host to the General Assembly. Seventy-five participants representing thirty of the thirty-six member countries attended the IMU sessions.

The United States delegation to the General Assembly and their alternates were as follows:

MARSTON MORSE, Institute for Advanced Study, *Chairman*
RICHARD BRAUER, Harvard University
SAUNDERS MAC LANE, University of Chicago
DEANE MONTGOMERY, Institute for Advanced Study
S. S. WILKS, Princeton University

Alternates:

A. A. ALBERT, University of Chicago
L. V. AHLFORS, Harvard University
RICHARD COURANT, New York University
J. L. DOOB, University of Illinois
NATHAN JACOBSON, Yale University

Several sessions of the General Assembly were devoted to discussions of reports and plans for future activities of the following IMU Commissions: *1*) the Commission on Scientific Publications, 2) the Commission on Mathematical Instruction, 3) the Commission on Exchange of Mathematicians,

and *4*) the Commission for the World Directory of Mathematicians. Details of the work of these four Commissions may be obtained from the U. S. National Committee of IMU.

The following officers of the Union were elected to serve for the four-year period 1959–62:

R. NEVANLINNA (Finland), *President*
P. ALEXANDROFF (U.S.S.R.), *Vice-President*
MARSTON MORSE (United States), *Vice-President*
B. ECKMANN (Switzerland), *Secretary*

The mathematicians attending the General Assembly felt satisfied with the rapid progress being made in mathematical research and were very pleased with the opportunity to become better acquainted with each other and to discuss the latest developments in the various fields of mathematics in the delightful atmosphere of St. Andrews.

INTERNATIONAL CONGRESS OF MATHEMATICIANS

The 11th International Congress of Mathematicians was held in Edinburgh, Scotland, August 14–21, 1958, under the auspices of the City of Edinburgh, the University of Edinburgh, the Royal Society of Edinburgh, the Royal Society of London, and under the patronage of His Royal Highness, the Duke of Edinburgh.

Nearly 1700 mathematicians from 53 countries attended the Congress. It was organized by a committee of British mathematicians into eight sections covering the following fields of mathematics: *1*) logic and foundations, *2*) algebra, *3*) theory of numbers, *4*) classical analysis, *5*) functional analysis, *6*) topology, *7*) algebraic geometry, *8*) differential geometry, *9*) probability and statistics, *10*) applied mathematics, *11*) mathematical physics, *12*) numerical analysis, and *13*) mathematical history and education. Approximately 650 papers were presented and sixty invited addresses were delivered.

The extent of United States participation in the Congress is indicated by the fact that over 300 American mathematicians attended the Congress, 125 of whom presented papers and 18 presented invited addresses.

The scientific program of the Congress was lively with active participation from some thirty countries. Several outstanding mathematical problems were solved, including one of Hilbert's list of problems and part of Burnside's Conjecture; another well-known problem was shown to be insoluble. The Proceedings of the Congress will be published and should be available late in 1959.

The two Field's medals, awarded every four years for outstanding current work by younger mathematicians, were presented to K. F. Roth, University College in London, for his work on geometrical problems of topology and to R. Thom, University of Strasbourg, for solving a problem in the theory of algebraic numbers.

INSTALLATION AND MAINTENANCE OF RESILIENT SMOOTH-SURFACE FLOORING

The rapid rise in the use of resilient smooth-surface flooring in buildings of every type during the past decade has made it an important factor to every segment of the building industry, as well as to the owners and operators of buildings. In order to correlate all phases of current research in this field and to define and discuss the advantages and limitations attendant upon the use of resilient flooring in a variety of applications the Building Research Institute held a conference on the "Installation and Maintenance of Resilient Smooth Surface Flooring" in Washington, September 17 and 18. Jack E. Gaston, Armstrong Cork Company, served as Conference Chairman as well as Chairman of the Conference Planning Committee.

In preparation for the Conference two subcommittees worked for many months on *1*) a survey of the problems encountered with the use of resilient smooth-surface flooring by architects, builders, contractors, building owners and operators; and *2*) a chart comparing the physical characteristics of the types and varieties of resilient smooth-surface flooring materials on the market today. The tabulated results of the survey and copies of the chart formed the basis for the two workshop discussions on "Bases and Fastening Methods" and "Installation and Maintenance."

In addition to the two workshop discussion periods, the conference attendants heard a roster of 14 invited experts present individual reports on bases for resilient smooth-surface flooring, fastening methods for base and finish flooring, and methods of installation and maintenance. The Proceedings of the Conference will be published and distributed to all registrants.

ECONOMICS OF GRADUATE STUDY

The need for more information on the economic status of graduate students has long been felt. Many inquiries about this matter have been made by academic scientists. The increasing cost of living and the altered living conditions on college campuses have called for a study of stipend structures. Many new types of support now exist which appear to exert some selectivity in the distribution of the graduate population among these programs. This in turn, in the opinion of some observers, has its effect on later career choice.

The National Academy of Sciences has received a grant from The Fund for the Advancement of Education to explore some of these factors. In view of the similarity of these problems among academic disciplines, the study will cover the social sciences and humanities as well. To this end the American Council of Learned Societies and the Social Science Research Council will cooperate with the Academy–Research Council in conducting the study. The Office of Scientific Personnel will be responsible for direction of the project.

A Committee drawn from the three cooperating organizations has been set up to guide the study with the following membership:

American Council of Learned Societies
J. Fletcher Wellemeyer
Robert Hoopes

Social Science Research Council
Donald Marquis
Elbridge Sibley

National Academy of Sciences–National Research Council
Ralph E. Cleland
M. H. Trytten

The study is being conducted by a staff under Dr. Clyde Hart of the National Opinion Research Center at the University of Chicago. Besides investigating the financial resources of graduate students and their needs, the study is expected to yield information on qualitative relationships between financial factors and such matters as quality distribution, choice of career, choice of type of support, and the effect of competing opportunities outside the field of graduate study.

The information will be gathered during the first and second semesters of the current academic year and should be available within the next twelve months.

NATIONAL SCIENCE FOUNDATION FELLOWSHIPS

For the eighth year the Fellowship Office of the Academy–Research Council is assisting the National Science Foundation with its fellowship program by receiving and evaluating fellowship applications for the 1959–60 academic year. The Foundation plans to award approximately 1,000 graduate and 200 postdoctoral fellowships in the mathematical, physical, medical, biological, and engineering sciences, including anthropology, psychology (excluding clinical psychology); in the following social sciences: geography, mathematical economics, econometrics, demography, information and communication theory, experimental and quantitative sociology, and the history and philosophy of science; and in certain interdisciplinary fields. These fellowships are open only to citizens of the United States and are awarded solely on the basis of ability.

Graduate fellowships are available to those who are working toward the masters' or doctoral degrees. College seniors who expect to receive a baccalaureate degree during the 1958–59 academic year are also eligible to apply. Postdoctoral fellowships are available to individuals who have a Ph.D. degree in one of the fields listed above or who have had research training and experience equivalent to that represented by such a degree. In addition, holders of the M.D., D.D.S., or D.V.M. degree are eligible provided that they can present an acceptable plan of study and research.

All applicants for graduate (predoctoral)

awards will be required to take an examination designed to test scientific aptitude and achievement. This examination, administered by the Educational Testing Service, will be given on January 19, 1959, at designated centers throughout the United States and certain foreign countries.

The annual stipends for graduate fellows are as follows: $1,800 for the first year; $2,000 for the intermediate year; and $2,200 for the terminal year. The annual stipend for postdoctoral fellows is $4,500. Dependency allowances will be made to married fellows. Tuition, laboratory fees, and limited travel allowances will also be provided.

Additional information and application forms may be obtained from the Fellowship Office of the Academy–Research Council. Applications for regular postdoctoral fellowships must be received by December 22, 1958; and those for graduate fellowships, by January 5, 1959. Awards will be announced by the National Science Foundation on March 15, 1959.

FOREIGN FIELD RESEARCH PROGRAM

The Academy–Research Council for the fourth consecutive year is conducting a program of geographical field research in foreign areas, sponsored by the Geography Branch of the Office of Naval Research and designed for young scientists who wish to undertake such research abroad. In the three years since the program was instituted, 24 awards have been made, and most of the field studies have yielded doctoral dissertations, three of which have already been published in the Academy–Research Council series.

Applications for support of field work to be initiated before April 1 will be accepted by the Division of Earth Sciences until December 1, 1958, and awards will be made shortly thereafter. The amount of support granted varies from project to project according to the location and duration of the study. Many investigations last a year or more.

Application forms and additional information may be obtained from the Division of Earth Sciences, Academy–Research Council, Washington 25, D. C.

AWARDS IN RADIOLOGICAL RESEARCH

On behalf of the James Picker Foundation the Academy–Research Council announces the continued availability of funds in support of radiological research. Applications are reviewed by the Committee on Radiology and final awards are made by the Foundation upon recommendation of the Division of Medical Sciences.

In line with the interests of the Foundation, the program is oriented toward, but not necessarily limited to, the diagnostic aspects of radiology. Support is not restricted to citizens of the United States or to laboratories within this country.

Three specific types of support are offered:

1) *Grants-in-aid,* designed to encourage investigations offering promise of improvement in radiological methods of diagnosis or treatment of disease. Research grants are awarded to institutions, rather than to individuals.
2) *Grants for Scholars,* a transitional form of support, designed to bridge the gap between the completion of fellowship training and the period when the young scientist has thoroughly demonstrated his competence as an independent investigator.
3) *Fellowships in Radiological Research,* open to candidates seeking to gain research skills leading to investigative careers in the field of radiology.

Applications in these three categories for the fiscal year 1959–60 should be submitted by December 1, 1958. Further details and application blanks may be obtained from the Division of Medical Sciences, Academy–Research Council, Washington 25, D.C.

CONFERENCE ON ELECTRICAL INSULATION

The twenty-seventh annual meeting of the Conference on Electrical Insulation was held at the Mellon Institute and the Westinghouse Research Laboratories in Pittsburgh, Pa., October 6–8. There were 180 members and guests attending the Conference.

During the 3-day meeting, 10 contributed papers and 4 invited papers were presented at the 5 technical sessions. Roundtables

were held on *a*) Developments and Problems Pertaining to High Voltage Cables, *b*) High Temperature Insulation Systems, *c*) Effects of Thermal History on Physical Properties of Polymers, *d*) Dielectric Breakdown, *e*) Dielectrics in Presence of Strong Radiation, *f*) Molecular Aspects of Dielectric Relaxation, and *g*) Transformer Insulation Systems—Their Specifications and Tests.

On Tuesday morning, October 7, Charles P. Smyth of Princeton University presented the fourth Whitehead Memorial Lecture on the subject of "The Structure and Relaxation of Dielectrics." At the business meeting in the afternoon the following officers were nominated for the 1959 Conference: John D. Hoffman, National Bureau of Standards, *Chairman;* W. McMahon, Bell Telephone Laboratories at Murray Hill, N. J., *Vice Chairman;* and S. I. Reynolds, General Electric Research Laboratory at Schenectady, *Secretary.* After the business session, the members and guests were invited to tour the Westinghouse Research Laboratory. Dr. P. N. Ross, Westinghouse Electric Corporation, was the guest speaker at the Conference Banquet on Tuesday evening, and E. C. Bain, Chairman of the Division of Engineering and Industrial Research, and J. A. Hutcheson, Vice President, Engineering, Westinghouse Electric Corporation, were guests of honor.

INTERNATIONAL UNION FOR THE CONSERVATION OF NATURE AND NATURAL RESOURCES

The Sixth General Assembly of the International Union for the Conservation of Nature and Natural Resources was held at Athens and Delphi, Greece, September 11–19. Approximately 250 delegates from 43 countries were in attendance. Denmark, Holland, Germany, Monaco, Morocco, The Netherlands, Sudan, and Switzerland sent official delegations. Other member countries were represented by delegates appointed by national societies and institutions. The United States delegation included Edward Graham, U. S. Soil Conservation Service, and Harold J. Coolidge, Executive Director of the Pacific Science Board, appointed by the Academy–Research Council, and 18 additional members representing other organizations.

The plenary session opened with an address by His Excellency the Minister to the Prime Minister's Office, M. Constantine Tsatsos, who spoke on behalf of the King and bestowed the Order of King George I on Charles J. Bernard and R. Heim, Honorary President and President of the Union, respectively.

Tuyosi Tamura (Japan) and W. Szafer (Poland) were elected honorary members of the Union.

The technical sessions were held in the Athens Graduate School of Economics and Business Sciences and were interspersed with numerous field trips as well as receptions and dinners. Over 200 papers prepared beforehand by specialists served as the basis of the sessions which dealt with the following subjects:

Theme 1—Soil and Water Conservation, with special reference to *a*) the use of vegetation in erosion control; *b*) the effects of dams on habitat and landscape (vegetation, local climate, etc.), with special attention to semiarid regions; *c*) the rates of run-off and evaporation; *d*) the influence of soil and water conservation on natural aquatic resources (from headwaters to, and including estuaries); and *e*) landscape management on an ecological basis.

Theme 2—Education and Conservation.

The Survival Service held a symposium on rare animals and plants of the Mediterranean region. Special meetings were also held to discuss present day problems of African game with the following well-known African specialists participating:

M. Cowie, Director of Kenya Parks
N. Simon, Director of Kenya's Wildlife Society
J. P. Harroy, Governor of Ruanda Urundi
R. Knobel, Director of South African Parks
D. Hey, Office of the Administration of Cape Province
T. Monod, Academie des Sciences of France
Abdel Nabi, Chief, Game Department of Sudan
F. F. Darling, United Kingdom
E. B. Worthington, Nature Conservancy
Victor Van Straelen, Institute of National Parks, Belgian Congo
W. Robyns, Institute of National Parks, Belgian Congo

Among the resolutions announced at the closing plenary session in the historic stadium at Delphi was one asking the Union's President to request the Secretary-General of the United Nations to establish a list of

national parks and equivalent reserves. The Union established a Committee to assist with the development of international cooperation in this same area. Other resolutions dealt with protecting gravely endangered species, such as the giant panda in China; with conservation education; the ecology commission; and with the need for strengthening conservation measures in Greece as well as in other countries around the Mediterranean.

The General Assembly elected the following officers and members of the Executive Board of the Union:

J. Baer (Switzerland), *President*
Lord Hurcomb (United Kingdom), *Vice-President*
V. Van Straelen (Belgium), *Vice-President*
Harold J. Coolidge (United States), *Vice-President*
A. de Launoit (Belgium), *Treasurer*
M. C. Bloemers (Netherlands), *Secretary-General*

Executive Board Members

Edward Graham (United States)
N. V. Hiep (Viet Nam)
S. De Camargo (Brazil)
W. Goetel (Poland)
A. A. Nabi (Sudan)
F. Bourliere (France)

The invitation to hold the Seventh General Assembly in Warsaw in July 1960 was unanimously accepted.

Several long field trips to various parts of Greece after the meetings afforded an opportunity for the delegates to see the classical monuments of ancient Greece and to appreciate the warm hospitality and friendliness of the Greek people.

CONFERENCE ON FRACTURE

The National Academy of Sciences–National Research Council has announced that a seminar on the Atomic Mechanisms of Fracture will be held in Cambridge, Mass., April 12–14, 1959. The seminar is being sponsored jointly by the Academy–Research Council, the National Science Foundation, the Office of Naval Research, and the Air Force Office of Scientific Research. The meeting is open to interested technical persons and will feature invited papers from the United States and abroad on the following topics: *a*) theoretical aspects of fracture, *b*) cleavage, *c*) crystalline and non-crystalline fracture, *d*) fatigue and ductile fracture, and *e*) high temperature fracture.

Further information may be obtained from the Chairman, B. L. Averbach, or the Secretary, D. K. Felbeck, Conference on Fracture, Academy–Research Council, Washington 25, D. C.

STAFF APPOINTMENTS

Robert A. Scala has been appointed to the staff of the Toxicological Information Center. Dr. Scala received his Ph.D. degree in physiology from the University of Rochester Medical School in 1958. His research has been in the field of antimetabolites.

Richard J. Mann has been appointed Research Assistant by the Prevention of Deterioration Center. Mr. Mann is an Annapolis graduate and for the past two years has served in the U.S. Navy. His work with the Center will utilize his broad engineering training and experience. He replaces **H. G. Shirk** who has returned to the teaching profession.

The Division of Physical Sciences has announced the appointment of **Oswald F. Schuette** as Executive Secretary of the Advisory Committee to the National Bureau of Standards and as Deputy Executive Secretary of the Division.

Dr. Schuette received his Ph.D. degree in physics from Yale University in 1949 where his field of research was separation of isotopes (thermal diffusion). Before joining the Academy staff Dr. Schuette spent 4 years as a science liaison officer for the U.S. Navy in Germany.

The Division of Medical Sciences has announced the appointment of **Brig. Gen. Sam F. Seeley,** U.S.A., Ret., as a Professional Associate, effective September 1. A graduate of the University of Minnesota School of Medicine, Dr. Seeley was trained in surgical research at the Mayo Clinic and is a diplomate of the American Board of Surgery. He was a pioneer in the use of intra-arterial transfusions and has contributed to the practice of vascular surgery and the study of shock. As an authority on wartime surgical problems, he was senior editor of the newly published NATO Handbook on Emergency War Surgery. At the time of his retirement on July 31, he was Chief of the Professional Division in the Office of the Surgeon General.

Catherine W. Blumberg joined the Division of Medical Sciences staff as a Professional Associate on August 1, succeeding **Helen M. Scoville** who retired. After graduation from the George Washington University School of Medicine, Dr. Blumberg maintained a private practice in Baltimore, Md., where she also served as school physician until 1941. Since then she has accompanied her husband, Col. Joe M. Blumberg, on his various assignments in the Army medical service, acquiring editorial experience and serving as chief of obstetrics and gynecology in several hospitals and dispensaries en route.

The Division of Medical Sciences also announces the retirement of **Isabel M. Wason.** Dr. Wason was first appointed to the editorial staff of the Atlas of Tumor Pathology in 1949 and has since served as staff officer of the Committee on Pathology, the Subcommittee on Oncology, the Committee on Cancer Diagnosis and Therapy, and the U. S. A. National Committee for the International Union Against Cancer.

RECORD OF MEETINGS

July	
2	Federal Construction Council, Task Group on Selection and Maintenance of Air Filters
8	Committee on Refractory Metals, Panel on Vanadium, *Chicago*
8–9	Special Advisory Committee on Moisture Protection for Slab-on-Ground Construction
	Advisory Committee on the Unified Soil Classification System
9	Conference on Preparation and Distribution of Certified Pure Chemicals
9–10	Plastics Study Group, Planning Committee
9–11	Conference on Research in Education, *Madison, Wis.*
10	National Advisory Committee for AASHO Road Test, *La Salle, Ill.*
	Federal Construction Council, Task Group on Underground Heat Distribution Systems
11	Agricultural Research Institute, Projects and Proposal Committee, *Skokie, Ill.*
	Special Moho Committee
	Titanium Alloy Sheet Rolling Panel, Evaluation Sub-panel, *Dallas*
12	Committee on International Exchange of Persons
	Institute of Laboratory Animal Resources
14	Institute of Laboratory Animal Resources, Governing Board
	Advisory Committee on Fellowship Selection Techniques
14–15	Committee on Agricultural Pests
15–16	Special Advisory Committee on Ducts for Warm Air Heating and Air Conditioning
16	Panel on Columbium and Tantalum
	Committee on Preservation of Indigenous Strains of Maize, Executive Committee, *New York City*

July	
16–19	Second Southern California Industry-Education Conference, *Lake Arrowhead, Calif.*
17	Plastics Study Group, Planning Committee
	Committee on Foods, Subcommittee on Microbiology, *Chicago*
21–22	Disaster Research Group
24	Committee on Foot Protection, *New York City*
24–25	Building Research Institute, Policy Planning Committee
28	Executive Committee for Study of Economic Factors Affecting Graduate Student Careers
29	Subcommittee on Dyeing Wool Type Fabrics (AG Shade 44) *Natick, Mass.*
30	Committee on a National Atlas of the United States
	Agricultural Board, Executive Committee and Ways and Means Committee, *Chicago*
31	Committee on Plastics and Elastomers, Subcommittee on Elastomers, *Natick, Mass.*
	Economic Data Panel for AASHO Road Test, *La Salle, Ill.*
August	
3	Committee on Plant Breeding and Genetics, *Lafayette, Ind.*
4	Steering Committee on Urban Research
6	Ad hoc Conference of Consultants on Food Texture, *Chicago*
10–16	International Congress of Radiation Research, *Burlington, Vt.*
11	Highway Research Board, Department of Traffic and Operations, *Chicago*
12	Committee on Animal Nutrition, Subcommittee on Feed Adjuvants, *St. Paul, Minn.*

August		August	
13	Committee on Foods, Subcommittee on Radiation Preservation, *Chicago*	20–21	Highway Research Board, Department of Economics, Finance, and Administration
14	Performance Rating Panel for AASHO Road Test, *Minneapolis*	21	Federal Construction Council, Operating Committee
15	Prosthetics Research Board, Executive Committee, *Detroit*		Ad hoc Committee on Ultraviolet Light Study
16–17	Committee on Geography Advisory to Office of Naval Research, *Santa Monica, Calif.*	25	Instrumentation Panel for AASHO Road Test, *Ottawa, Ill.*
18	Highway Research Board, Department of Materials and Construction, Bituminous Division, *St. Louis*	25	Highway Research Board, Symposium on Frost Heave and Frost Action in Soils, *Ottawa, Canada*
	Advisory Board on Education	25–29	Symposium on Naval Hydrodynamics
18–19	Committee on Soil and Water Conservation, *Madison, Wis.*	26	Committee on Globes
18–20	Committee on Children's Prosthetic Problems Conference, *Grand Rapids*	27	Federal Construction Council, Task Group on Piling
19–20	Subcommittee on Carcinogenesis, *Middledam, Me.*		Federal Construction Council, Task Group on Soil Compaction
		28	Federal Construction Council, Task Group on Selection and Maintenance of Air Filters

NEW PUBLICATIONS

Birch, Francis. *Thermal Considerations in Deep Disposal of Radioactive Waste . . . Report for the Committee on Waste Disposal, Division of Earth Sciences, Sponsored by The Atomic Energy Commission.* Washington, NAS–NRC, 1958. (NAS–NRC Publication 588.) 22 p. $1.00.

Burghardt, Andrew F. *The Political Geography of Burgenland.* Washington, NAS–NRC, 1958. (NAS–NRC Publication 587. Foreign Field Service Program Sponsored by Office of Naval Research, Report no. 2.) 352 p. $2.00.

Carpenter, Samuel T., and Linsenmeyer, Roy F. *Weld Flaw Evaluation.* Washington, NAS–NRC, 1958. (Serial No. SSC-105, Final Report of Project SR-126 to the Ship Structure Committee.) 117 p., illus.

Conference on Hemoglobin, 2–3 May, 1957, Held under the Auspices of The Division of Medical Sciences, National Academy of Sciences–National Research Council, with the Support of The National Heart Institute, National Institutes of Health. Washington, NAS–NRC, 1958. (NAS–NRC Publication 557.) 303 p., illus. $3.00.

Fisher, R. L., *ed. Preliminary Report on Expedition Downwind, University of California, Scripps Institution of Oceanography, IGY Cruise to the Southeast Pacific, by the Members of the Expedition.* Washington, NAS–NRC, 1958. (IGY World Data Center A, IGY General Report Series no. 2.) 58 p., 21 figures. $1.00.

Gerard, R. W., and Stevens, Russell B., *eds. Concepts of Biology . . . Based on a Conference Sponsored by the Biology Council . . .* Washington, NAS–NRC, 1958. (NAS–NRC Publication 560.) 215 p. $1.75.

Hanessian, John, Jr., and Guttmacher, Ilene, *eds. Experimental Results of the U.S. Rocket Program for the International Geophysical Year to July 1, 1958.* Washington, NAS–NRC, 1958. (IGY World Data Center A, Rockets and Satellites, IGY Rocket Report Series no. 1.) 236 p., illus. $1.00.

Hynek, J. A., and Schilling, G. F., *eds. Observational Information on Artificial Earth Satellites.* Washington, NAS–NRC, 1958. (Smithsonian Institution Astrophysical Observatory, Excerpts from Special Reports nos. 12 and 13. IGY World Data Center A, Rockets and Satellites, IGY Satellite Report Series no. 4.) 38 p. $1.00.

International Conference on Scientific Information, Washington, D. C., 1958. *Preprints of Papers . . .* Washington, NAS–NRC, 1958. [1420] p. $10.00.

Miller, Donald F. *Composition of Cereal Grains and Forages. Prepared . . . under the Auspices of the Committee on Feed Composition of the Agricultural Board.* Washington, NAS–NRC, 1958. (NAS–NRC Publication 585.) 663 p.

National Academy of Sciences. IGY World Data Center A. *Reports and Analyses of Satellite Observations.* Washington, NAS–NRC, 1958. (Smithsonian Institution Astrophysical Observatory, Special Reports nos. 15 and 16 and Excerpts from no. 14. IGY World Data Center A, Rockets and Satellites, IGY Satellite Report Series no. 6.) 60 p. $1.00.

National Conference on Clays and Clay Minerals, 5th, University of Illinois, 1956. *Clays and Clay Minerals . . . Ada Swineford, Editor . . . Sponsored by Committee on Clay Minerals of the National Academy of Sciences–National Research Council and University of Illinois.* Washington,

NAS–NRC, 1958. (NAS–NRC Publication 566.) 360 p., illus. $4.50.

National Research Council. Committee on Agricultural Equipment. *Research Needs Relating to Agricultural Equipment.* Washington, NAS–NRC, 1958. 10 p.

National Research Council. Committee on Cereals. *Cereal Enrichment in Perspective, 1958.* Washington, NAS–NRC, 1958. 19 p.

National Research Council. Committee on Educational Policies. *Biological Education, a Partial Bibliography.* Washington, NAS–NRC, 1957. (NAS–NRC Publication 518.) 159 p. $3.00.

National Research Council. Committee on Educational Policies. *Laboratory and Field Studies in Biology: A Sourcebook for Secondary Schools.* Prelim. ed. Washington, NAS–NRC, 1957. 971 p. $7.50.

National Research Council. Committee on Educational Policies. *Recommendations on Undergraduate Curricula in the Biological Sciences. Report of a Conference Held at Washington, D.C., December 8–9, 1956 and Chapel Hill, N.C., April 1–4, 1957.* Washington, NAS–NRC, 1958. (NAS–NRC Publication 578.) 86 p. $1.75.

National Research Council. Committee on Nuclear Science. Subcommittee on Nuclear Geophysics. *Cosmological and Geological Implications of Isotope Ratio Variations, Proceedings of an Informal Conference, Massachusetts Institute of Technology, June 13–15, 1957.* Washington, NAS–NRC, 1958. (NAS–NRC Publication 572. Nuclear Science Series Report no. 23.) 187 p. $1.75.

National Research Council. Food and Nutrition Board. *Recommended Dietary Allowances, Revised 1958.* Washington, NAS–NRC, 1958. (NAS–NRC Publication 589.) 36 p. $1.00.

National Research Council. Maritime Cargo Transportation Conference. *Recent Research in Maritime Transportation, Proceedings of the Second Symposium, 13 February 1958, Washington, D.C.* Washington, NAS–NRC, 1958. (NAS–NRC Publication 592.) 134 p. $2.00.

Symposium on Preventive and Social Psychiatry, Sponsored Jointly by the Walter Reed Army Institute of Research, Walter Reed Army Medical Center, and the National Research Council, 15–17 April, 1957 . . . Washington, U.S. Govt. Printing Office, 1958. 529 p. $2.00.

Warwick, James W. *Radio Observations of Soviet Satellite 1957 Alpha 2 and 1957 Beta 1.* Washington, NAS–NRC, 1958. (University of Colorado, High Altitude Observatory, Scientific Report no. 10. IGY World Data Center A, Rockets and Satellites, IGY Satellite Report Series no. 5.) 50 p. $1.00.

Woollard, George P. *Preliminary Reports on the IGY Pendulum, Gravimeter and Seismological Programs at the University of Wisconsin.* Washington, NAS–NRC, 1958. (IGY World Data Center A. IGY General Report Ser. no. 3.) 31 p. $1.00.

Notice of Academy Meetings

NATIONAL ACADEMY OF SCIENCES

Autumn Meeting, University of California at Berkeley, November 6-8, 1958
Annual Meeting, Washington, D. C., April 27-29, 1959

NATIONAL ACADEMY OF SCIENCES–NATIONAL RESEARCH COUNCIL

Governing Board, Washington, D. C., December 14, 1958
Governing Board, Washington, D. C., February 8, 1959
Governing Board, Washington, D. C., April 26, 1959
Governing Board, Washington, D. C., June 13, 1959

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